AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A scanning type display optical system comprising:

a deflection device deflecting a light beam from a light source in two dimensions; and

an image-forming optical system forming an image to be displayed with the light beam deflected by the deflection device;

wherein a direction from which the light beam coming from the light source is incident on the deflection device is oblique with respect to at least one of the two deflection axes of the deflection device; and

the image-forming optical system comprises an optical element which is tilted and/or shifted with respect to a center axis of a two-dimensional deflection range over which the light beam is deflected by the deflection device.

Claim 2 (Original): The scanning display optical system according to claim 1,

wherein the image-forming optical system comprises a first optical element having negative optical power, which is arranged on the side closest to the deflection device, a second optical element having positive optical power, which is arranged on the side of an image plane, and a third optical element having positive power, which is arranged between the first optical element and the second optical element;

wherein the third optical element is tilted and shifted with respect to the center axis of the two-dimensional deflection range over which the light beam is deflected by the deflection device, to the side on which the light beam coming from the light source is incident on the deflection device; and

the second optical element is shifted to the opposite of the side on which the light beam coming from the light source is incident on the deflection device.

Claim 3 (Original): The scanning type display optical system according to claim 2, wherein the second optical element is a meniscus lens whose convex surface faces toward the deflection device; and

the third optical element is a meniscus lens whose convex surface faces toward an image plane.

Claim 4 (Original): The scanning type display optical system according to claim 1, wherein an incident angle of the light beam on an image plane by the image-forming optical system is 5° or less.

Claim 5 (Original): The scanning type display optical system according to claim 1, further comprising a reflective surface guiding the light beam from the light source so that the light beam is incident on the deflection device from a direction oblique with respect to the deflection axes.

Claim 6 (Original): The scanning type display optical system according to claim 1, further comprising a converging optical element arranged between the light source and the image-forming optical system, and converting the light beam into converging light beam.

Claim 7 (Original): The scanning type display optical system according to claim 6, further comprising a reflective surface guiding the light beam from the converging optical element so that the light beam is incident on the deflection device from a direction oblique with respect to the deflection axes.

Claim 8 (Original): The scanning type display optical system according to claim 2, wherein the following condition is satisfied:

$v1 < v2$

where v1 is the Abbe number of the first optical element and v2 is the Abbe number of the second and third optical element.

Claim 9 (Original): The scanning type display optical system according to claim 1, further comprising an eyepiece optical system guiding deflected light beam from the image-forming optical system to an eye of an observer.

Claim 10 (Currently Amended): A scanning type display optical system comprising:

a deflection device deflecting a light beam from a light source in two dimensions; and

~~an image forming~~ a first optical system forming an image to be displayed with the light beam deflected by the deflection device and including a plurality of optical elements with optical powers;

wherein ~~the image forming optical system comprises~~ a first optical element ~~having negative optical power~~ of the optical elements, which is arranged on the side closest to the deflection device, is a biconcave lens; and

a second optical element ~~having positive optical power~~ of the optical elements, which is arranged on the side closest to an image plane~~; and the second optical element,~~ is a meniscus lens whose convex surface surfaces toward the deflection device.

Claim 11 (Currently Amended): The scanning type display optical system according to claim 10,

wherein an incident angle of the light beam on the image plane by the ~~image forming~~ first optical system is 5° or less.

Claim 12 (Original): The scanning type display optical system according to claim 10,

further comprising a reflective surface guiding the light beam from the light source to the deflection device.

Claim 13 (Currently Amended): The scanning type display optical system according to claim 10,

further comprising a converging optical element arranged between the light source and the ~~image-forming~~ first optical system, and converting the light beam into converging light beam. [[.]]

Claim 14 (Original): The scanning type display optical system according to claim 13, further comprising a reflective surface guiding the light beam from the converging optical element to the deflection device.

Claim 15 (Original): The scanning type display optical system according to claim 10, wherein the following condition is satisfied:

$v1 < v2$

where v1 is the Abbe number of the first optical element and v2 is the Abbe number of the second optical element.

Claim 16 (Currently Amended): The scanning type display optical system according to claim 10, wherein the following condition is satisfied:

$0.4 \leqq D1/D \leqq 0.8$

where D is a distance from the deflection device to the image plane of the ~~image-forming~~ first optical system and D1 is a distance from the deflection device to an incident surface of the first optical element.

Claim 17 (Currently Amended): The scanning type display optical system according to claim 10, wherein the following condition is satisfied:

$0.05 \leqq D2/D \leqq 0.3$

where D is a distance from the deflection device to the image plane of the ~~image-forming~~ first optical system and D2 is a distance from an incident surface of the second optical element to the image plane of the ~~image-forming~~ first optical system.

Claim 18 (Currently Amended): The scanning type display optical system according to claim 10, further comprising an eyepiece optical system guiding deflected light beam from the ~~image-forming~~ first optical system to an eye of an observer.

Claim 19 (New): The scanning type display optical system according to claim 10, further comprising a second optical system forming a final image with the light beam of the image at a conjugate position with respect to a position at which the image is formed.

Claim 20 (New): A scanning type display apparatus comprising:

a light source; and

a scanning type display optical system;

wherein the scanning type display optical system comprises a deflection device deflecting the light beam from the light source in two dimensions and an image-forming optical system forming an image to be displayed with the light beam deflected by the deflection device;

a direction from which the light beam coming from the light source is incident on the deflection device is oblique with respect to at least one of the two deflection axes of the deflection device; and

the image-forming optical system comprises an optical element which is tilted and/or shifted with respect to a center axis of a two-dimensional deflection range over which the light beam is deflected by the deflection device.

Claim 21 (New): A scanning type display apparatus comprising:

a light source; and

a scanning type display optical system;

wherein the scanning type display optical system comprises a deflection device deflecting the light beam from the light source in two dimensions and a first optical system forming an image to be displayed with the light beam deflected by the deflection device and including a plurality of optical elements with optical powers;

a first optical element of the optical elements, which is arranged on the side closest to the deflection device, is a biconcave lanes; and

a second optical element of the optical elements,, which is arranged on the side closest to an image plane, is a meniscus lens whose convex surface surfaces toward the deflection device.

Claim 22 (New): A scanning type display optical system comprising:

a deflection device deflecting a light beam from a light source in two dimensions; and

a first optical system forming a first image to be displayed with the light beam deflected by the deflection device and including a plurality of optical elements with optical powers;

wherein an optical axis of one of the optical elements is tilted and/or shifted with respect to an optical axis of other optical element.

Claim 23 (New): The scanning type display optical system according to claim 22,

further comprising a second optical system forming a second image with the light beam of the first image at conjugate position with respect to a position at which the first image is formed.

Claim 24 (New): A scanning type display apparatus comprising:

a light source; and

a scanning type display optical system;

wherein the scanning type display optical system comprises a deflection device deflecting the light beam from the light source in two dimensions and a first optical system forming a first image to be displayed with the light beam deflected by the deflection device and including a plurality of optical elements with optical powers; and

an optical axis of one of the optical elements is tilted and/or shifted with respect to an optical axis of other optical element.

Claim 25 (New): A scanning type display optical system comprising:

a deflection device deflecting a light beam from a light source in two dimensions; and

a first optical system forming a first image to be displayed with the light beam deflected by the deflection device and including a plurality of optical elements with optical powers;

wherein a first optical element of the optical elements, which is arranged on the side closest to the deflection device, is a biconcave lens; and

a second optical element of the optical elements, which is arranged on the side closest to a first image plane, is a meniscus lens whose convex surface surfaces toward the deflection device.

Claim 26 (New): The scanning type display optical system according to claim 25,

further comprising a second optical system forming a second image with the light beam of the first image at conjugate position with respect to a position at which the first image is formed.

Claim 27 (New): A scanning type display apparatus comprising:

a light source; and

a scanning type display optical system;

wherein the scanning type display optical system comprises a deflection device deflecting a light beam from a light source in two dimensions and a first optical system forming a first image to be displayed with the light beam deflected by the deflection device and including a plurality of optical elements with optical powers;

a first optical element of the optical elements, which is arranged on the side closest to the deflection device, is a biconcave lens; and

a second optical element of the optical elements, which is arranged on the side closest to a first image plane, is a meniscus lens whose convex surface surfaces toward the deflection device.